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Joseph J. Laks
Thomson Licensing LLC
2 Independence Way, Patent Operations
PO Box 5312
PRINCETON, NJ 08543

EXAMINER	
BANTAMOI, ANTHONY	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/561,898	HUTTER, INGO	
	Examiner	Art Unit	
	ANTHONY BANTAMOI	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/22/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-5, and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Netravali et al EP Patent Application 0 705 012 in view of Stahl et al US Patent 6,665,020, and further in view of Humpleman US Patent 7,308,644 (hereafter referenced as Netravali, Stahl and Humpleman).

Regarding claim 1, Netravali in column 5, 5-14 disclose two different protocol networks 10 and 20 wherein the first network 10 and second network 20 are bridged together by a gateway device, the nodes of 10 and 20 which are 30 and 40 respectively are linked by a protocol converter 50 which allows for protocol exchange between the two networks in order for devices in one network to be able to communicate with devices on the other network as shown in figure 1 which reads on “a method for controlling a network station in a network of a first type from a network station in a network of a second type, a network connection unit being provided for the connection of the two networks, the network connection unit performing a direct conversion of the control commands in the format of the network of the second type into the corresponding format of the network of the first type if the device to be controlled in the network of the first type has a corresponding functionality”.

Netravali does not disclose, wherein the network connection unit performs an indirect conversion of the control commands if the device to be controlled in the network of the first type does not have a corresponding functionality, in such a way that a check is made to determine whether a data connection to a further network station which has a corresponding functionality is present for the network station to be controlled, and, if so, that the control command is converted into the corresponding format and is transmitted to the further network station. Stahl discloses in column 8 15-27 a home network example of an indirect conversion of a remote control command given to an RCA DTV, the play command for example is convert to a universal format and transmitted to a SONY DVCR to be executed which reads on “wherein the network connection unit performs an indirect conversion of the control commands if the device to be controlled in the network of the first type does not have a corresponding functionality”. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Stahl in order to a minimal cost of interoperability.

Netravali does not disclose in such a way that a check is made to determine whether a data connection to a further network station which has a corresponding functionality is present for the network station to be controlled, and, if so, that the control command is converted into the corresponding format and is transmitted to the further network station. Humpleman in column 15, 21-24 discloses a GENIP (Win 32 console-based application) 316 that detects the addition or removal of a device on a home network and notifies the session manager which reads on "in such a way that a check is

made to determine whether a data connection to a further network station which has a corresponding functionality is present for the network station to be controlled". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Humpleman in order to constantly update the session manager.

Netravali in column 5, 5-14 discloses a protocol converter 50 that allows for conversion between first and second networks which reads on "and, if so, that the control command is converted into the corresponding format and is transmitted to the further network station".

Regarding claim 2, Netravali does not disclose it being the case that, if the further network station does not have the corresponding functionality, a check is made to determine whether a data connection to a third network station which has a corresponding functionality is set up for the further network station, and, if so, that the control command is converted into the corresponding format of the third network station and is transmitted to the third network station.

Humpleman in column 15, 21-24 discloses a GENIP (Win 32 console-based application) 316 that detects the addition or removal of a device on a home network and notifies the session manager which reads on "a check is made to determine whether a data connection to a third network station which has a corresponding functionality is set up for the further network station". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Humpleman in order to constantly update the session manager.

Stahl discloses in column 8 15-27 a home network example of an indirect conversion of a remote control command given to an RCA DTV, the play command for example is convert to a universal format and transmitted to a SONY DVCR to be executed which reads on "it being the case that, if the further network station does not have the corresponding functionality and, if so, that the control command is converted into the corresponding format of the third network station and is transmitted to the third network station". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Stahl in order to a minimal cost of interoperability.

Regarding claim 3, Netravali in figure 1, discloses a printer device 90 in network 20 able to display information on paper and a computer 80 including a monitor in network 10 able to control printer 90 which reads on "the method as claimed, the network station to be controlled in the network of the first type being a display device and the control device in the network of the second type being a TV set".

Regarding claim 4, Netravali does not disclose the method, it being the case that, upon arrival of a control command with regard to the program setting, a check is made by the network connection unit to determine whether the display device maintains a data connection set up to a tuner device, and, if so, that the control command is converted into the matching format of the tuner device and is transmitted to the tuner device.

Humpleman in column 15, 21-24 discloses a GENIP (Win 32 console-based application) 316 that detects the existence of a device on a home network and notifies

the session manager which is able to send commands to operate for example dad's TV on the network form a user interface as shown in figure 10 which reads on "it being the case that, upon arrival of a control command with regard to the program setting, a check is made by the network connection unit to determine whether the display device maintains a data connection set up to a tuner device, and, if so, that the control command is converted into the matching format of the tuner device and is transmitted to the tuner device".

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Humpleman in order to control a plurality of devices on a network.

Regarding claim 5, Netravali does not disclose the method, it being the case that, upon arrival of a control command with regard to the volume setting, a check is made by the network connection unit to determine whether the display device maintains a data connection set up to a video data source device, and, if so, whether a data connection to an audio device is furthermore set up for the video data source device, and, if so, that the control command with regard to the volume setting is converted into the matching format of the audio device and is transmitted to the audio device.

Humpleman in column 15, 21-24 discloses a GENIP (Win 32 console-based application) 316 that detects the existence of a device on a home network and notifies the session manager which is able to send commands to increase or decrease for example dad's TV volume form a user interface as shown in figure 10 which reads on "the method, it being the case that, upon arrival of a control command with regard to the

volume setting, a check is made by the network connection unit to determine whether the display device maintains a data connection set up to a video data source device, and, if so, whether a data connection to an audio device is furthermore set up for the video data source device, and, if so, that the control command with regard to the volume setting is converted into the matching format of the audio device and is transmitted to the audio device".

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Humpleman in order to control a plurality of devices on a network.

Regarding claim 10, Netravali in column 5, 5-14 disclose two different protocol networks 10 and 20 wherein the first network 10 and second network 20 are bridged together by a gateway device, the nodes of 10 and 20 which are 30 and 40 respectively are linked by a protocol converter 50 which allows for protocol exchange between the two networks in order for devices in one network to be able to communicate with devices on the other network as shown in figure 1 which reads on "a connection unit for the connection of a network of a first type to a network of a second type, having conversion means for the direct conversion of control commands of one network type into the format of the other network type".

Netravali does not disclose, wherein the network connection unit performs an indirect conversion of the control commands if the device to be controlled in the network of the first type does not have a corresponding functionality, in such a way that a check is made to determine whether a data connection to a further network station which has

a corresponding functionality is present for the network station to be controlled, and, if so, that the control command is converted into the corresponding format and is transmitted to the further network station. Stahl discloses in column 8 15-27 a home network example of an indirect conversion of a remote control command given to an RCA DTV, the play command for example is convert to a universal format and transmitted to a SONY DVCR to be executed which reads on “wherein the connection unit has further conversion means for the indirect conversion of control commands, which are activated if the device to be controlled in the network of the first type does not have the functionality corresponding to the control command”. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Stahl in order to a minimal cost of interoperability.

Netravali does not disclose in such a way that a check is made to determine whether a data connection to a further network station which has a corresponding functionality is present for the network station to be controlled, and, if so, that the control command is converted into the corresponding format and is transmitted to the further network station. Humpleman in column 15, 21-24 discloses a GENIP (Win 32 console-based application) 316 that detects the addition or removal of a device on a home network and notifies the session manager which reads on "the further conversion means checking whether a data connection to a further network station which has a corresponding functionality is present for the network station to be controlled”. Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Netravali as taught by Humpleman in order to constantly update the session manager.

Netravali in column 5, 5-14 discloses a protocol converter 50 that allows for conversion between first and second networks which reads on "and, if so, that they convert the control command into the corresponding format for the further network station and transmit it to the further network station".

Regarding claim 11, Netravali does not disclose the connection unit as claimed, it being the case that, if the further network station does not have the corresponding functionality, the further conversion means check whether a data connection to a third network station which has a corresponding functionality is set up for the further network station, and, if so, that they convert the control command into the corresponding format of the third network station and transmit it to the third network station.

Humpleman in column 15, 21-24 discloses a GENIP (Win 32 console-based application) 316 that detects the addition or removal of a device on a home network and notifies the session manager which reads on "the further conversion means check whether a data connection to a third network station which has a corresponding functionality is set up for the further network station". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Humpleman in order to constantly update the session manager.

Stahl discloses in column 8, 15-27 a home network example of an indirect conversion of a remote control command given to an RCA DTV, the play command for example is convert to a universal format and transmitted to a SONY DVCR to be

executed which reads on "it being the case that, if the further network station does not have the corresponding functionality, and, if so, that they convert the control command into the corresponding format of the third network station and transmit it to the third network station". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Stahl in order to a minimal cost of interoperability.

Regarding claim 12, Netravali does not disclose the connection unit as claimed, it being the case that, upon arrival of a control command with regard to the program setting from a TV set in the network of the second type, the further conversion means check whether the display device in the network of the first type to which the control command is directed maintains a data connection set up to a tuner device, and, if so, that they convert the control command into the matching format of the tuner device and transmit it to the tuner device.

Humpleman in column 15, 21-24 discloses a GENIP (Win 32 console-based application) 316 that detects the existence of a device on a home network and notifies the session manager which is able to send commands to operate for example dad's TV on the network form a user interface as shown in figure 10 which reads on "it being the case that, upon arrival of a control command with regard to the program setting from a TV set in the network of the second type, the further conversion means check whether the display device in the network of the first type to which the control command is directed maintains a data connection set up to a tuner device, and, if so, that they

convert the control command into the matching format of the tuner device and transmit it to the tuner device".

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Humpleman in order to control a plurality of devices on a network.

Regarding claim 13, Netravali does not disclose the connection unit as claimed, it being the case that, upon arrival of a control command with regard to the volume setting, the further conversion means check whether the display device maintains a data connection set up to a video data source device, and, if so, whether a data connection to an audio device is furthermore set up for the video data source device, and, if so, convert the control command with regard to the volume setting into the matching format of the audio device and transmit it to the audio device.

Humpleman in column 15, 21-24 discloses a GENIP (Win 32 console-based application) 316 that detects the existence of a device on a home network and notifies the session manager which is able to send commands to increase or decrease for example dad's TV volume form a user interface as shown in figure 10 which reads on "the connection unit as claimed, it being the case that, upon arrival of a control command with regard to the volume setting, the further conversion means check whether the display device maintains a data connection set up to a video data source device, and, if so, whether a data connection to an audio device is furthermore set up for the video data source device, and, if so, convert the control command with regard to

the volume setting into the matching format of the audio device and transmit it to the audio device".

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Humpleman in order to control a plurality of devices on a network.

3. Claims 6-7, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Netravali in view of Stahl, in view of Humpleman, and further in view of Jean-Baptiste et al EP 1 286 501(hereafter referenced as Jean-Baptiste).

Regarding claim 6, Netravali, Stahl, and Humpleman do not disclose the network of the first type being a network based on the HAVi Standard, where HAVi stands for Home Audio/Video interoperability. Jean-Baptiste discloses a HAVi network connected to an UPnP network which reads on "the network of the first type being a network based on the HAVi Standard, where HAVi stands for Home Audio/Video interoperability". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Jean-Baptiste in order to promote data sharing among different devices.

Regarding claim 7, Netravali, Stahl, and Humpleman do not disclose the network of the second type being a network based on the Internet Protocol, in particular UPnP, where UPnP stands for Universal Plug and Play. Jean-Baptiste discloses a HAVi network connected to an UPnP network which reads on "the network of the second type being a network based on the Internet Protocol, in particular UPnP, where UPnP stands for Universal Plug and Play". Therefore, it would have been obvious to one of ordinary

skill in the art at the time the invention was made to modify Netravali as taught by Jean-Baptiste in order to promote data sharing among different devices.

Regarding claim 14, Netravali, Stahl, and Humpleman do not disclose the connection unit as claimed; it being designed for the connection of a network based on the HAVi standard, where HAVi stands for Home Audio/Video interoperability, to a network based on the Internet Protocol, in particular UPnP, where UPnP stands for Universal Plug and Play. Jean-Baptiste discloses a HAVi network connected to an UPnP network which reads on "the connection unit as claimed, it being designed for the connection of a network based on the HAVi standard, where HAVi stands for Home Audio/Video interoperability, to a network based on the Internet Protocol, in particular UPnP, where UPnP stands for Universal Plug and Play". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Jean-Baptiste in order to promote data sharing among different devices.

4. Claims 8-9, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Netravali in view of Stahl, in view of Humpleman, in view of Jean-Baptiste and further in view of Weber et al US Patent Application 2004/0227779 (hereafter referenced as Weber).

Regarding claim 8, Netravali, Stahl, Humpleman and Jean-Baptiste do not disclose the control command for program setting being converted into the HAVi command Tuner::SelectService of a tuner FCM, where FCM stands for Functional Component Module. Weber in section 30, 1-5 discloses specific FCM functionalities

which are already defined in the HAVi standard; they include Amplifier FCM and Tuner FCM which reads on "the control command for program setting being converted into the HAVi command Tuner::SelectService of a tuner FCM, where FCM stands for Functional Component Module". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Weber in order to promote data sharing among different devices.

Regarding claim 9, Netravali, Stahl, Humpleman and Jean-Baptiste do not disclose the control command for volume setting being converted into the HAVi command Amplifier::SetVolume of an amplifier FCM. Weber in section 30, 1-5 discloses specific FCM functionalities which are already defined in the HAVi standard; they include Amplifier FCM and Tuner FCM which reads on "the control command for volume setting being converted into the HAVi command Amplifier::SetVolume of an amplifier FCM". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Weber in order to promote data sharing among different devices.

Regarding claim 15, Netravali, Stahl, Humpleman and Jean-Baptiste do not disclose the connection unit as claimed, the further conversion means being designed such that they convert the control command for program setting into the HAVi command Tuner::SelectService of a tuner FCM, where FCM stands for Functional Component Module. Weber in section 30, 1-5 discloses specific FCM functionalities which are already defined in the HAVi standard; they include Amplifier FCM, and Tuner FCM which reads on "the connection unit as claimed, the further conversion means being

designed such that they convert the control command for program setting into the HAVi command Tuner::SelectService of a tuner FCM, where FCM stands for Functional Component Module". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Weber in order to promote data sharing among different devices.

Regarding claim 16, Netravali, Stahl, Humpleman and Jean-Baptiste do not disclose the connection unit as claimed; the further conversion means being designed such that they convert the control command for volume setting into the HAVi command Amplifier::SetVolume of an amplifier FCM. Weber in section 30, 1-5 discloses specific FCM functionalities which are already defined in the HAVi standard; they include Amplifier FCM and Tuner FCM which reads on "the connection unit as claimed, the further conversion means being designed such that they convert the control command for volume setting into the HAVi command Amplifier::SetVolume of an amplifier FCM". Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Netravali as taught by Weber in order to promote data sharing among different devices.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY BANTAMOI whose telephone number is (571)270-3581. The examiner can normally be reached on Monday - Friday 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272 7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Bantamoi
Examiner
Art Unit 2623

/Anthony Bantamoi/
Examiner, Art Unit 2623

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2623